



United States Department of Agriculture

June 24, 2020

Elissa Reaves, Ph.D., Acting Director
Pesticide Re-Evaluation Division (7508P)
Office of Pesticide Programs, Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460-0001

Re: USDA Comments on the Proposed Interim Decision for Deltamethrin for Registration Review; EPA-HQ-OPP-2009-0637.

Dear Dr. Reaves:

Thank you for the opportunity to comment on EPA's Proposed Interim Decision (PID) for deltamethrin, posted on May 5, 2020 in the *Federal Register*. Deltamethrin is a synthetic pyrethroid, sodium channel modulating chemical, classified by the Insecticide Resistance Action Committee (IRAC) as a Group 3A insecticide (IRAC, 2019). Deltamethrin is widely used in agriculture, residential, commercial, ornamental, and natural settings to control a wide variety of pests that impact public health as well as agricultural production. Deltamethrin is registered on numerous agricultural crops and use sites, and for various application methods such as foliar sprays, livestock premise treatments, spot treatments, and treatment of stored products.

USDA appreciates EPA's broad understanding and consideration of the agricultural benefits of deltamethrin. Particularly as organophosphate insecticides recede in prominence in U.S. agriculture, pyrethroids like deltamethrin have been elevated to serve as the linchpin tools for broad-spectrum insect management across numerous crops and their associated integrated pest management programs.

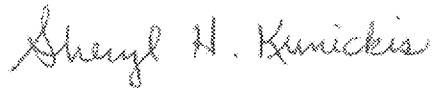
We support EPA's proposed label changes, including updates to resistance management advisory language and EPA's proposed advisory language for protection of pollinators. Given the well-established and widely known acute toxicity concerns for bees, we believe that users of pyrethroids such as deltamethrin are generally aware of how to use these insecticides in ways that limit exposure to pollinators. EPA's additional proposed language will provide added consistency and useful resources for users seeking additional information on state managed pollinator protection plans and reporting systems for bee kills. We also support EPA's previously published ecological mitigation proposal for pyrethrins/synthetic pyrethroids and submitted comments to EPA on January 13, 2020. USDA believes that in total, EPA's proposed label changes will not negatively impact growers and will provide added clarity to users of deltamethrin products.

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Additional detailed comments are attached for your review. These include specific concerns around droplet size verbiage for drift mitigation, international maximum residue limit (MRL) harmonization, and comments from USDA's Animal and Plant Health Inspection Service on the benefits of deltamethrin for their programmatic needs. USDA stands ready to provide EPA with additional information on the benefits of deltamethrin, if needed. Please let me know if you would like to discuss further.

Sincerely,

A handwritten signature in cursive script that reads "Sheryl H. Kunickis".

Sheryl H. Kunickis, Ph.D.
Director

USDA Comments

Droplet Size Restriction Verbiage

EPA's drift mitigation language, first published as part of a prior ecological mitigation proposal, reflects a good understanding of USDA's and other stakeholders' prior input on the limitations around droplet size control for airblast sprayers. That proposal, which is intended to be applied to pyrethrins and synthetic pyrethroid labeling for outdoor agricultural applications, still included workable language about nozzle orientation, turning off outer-facing nozzles when treating the outer row, etc., which USDA strongly supports.

However, for the proposed ground-boom and aerial restrictions, USDA has some remaining concern with the specific language mandating actual droplet sizes, as this may not be readily feasible and is inconsistent with what has been proposed for other PID cases. Given that nozzles are often marketed with specifications directly applicable to droplet size control, USDA requests that EPA consider the following alternative language that has been proposed more recently for numerous other PIDs for ground-boom and aerial applications:

"Applicators are required to select nozzles and pressure that deliver medium or coarser droplets as indicated in manufacturers' catalogues and in accordance with American Society of Agricultural & Biological Engineers Standard 572.1 (ASABE §572.1)."

International MRL Harmonization

USDA recognizes the increasing importance of international MRL harmonization efforts and supports EPA's proposal to harmonize the existing U.S. tolerances for deltamethrin in/on tomato, cattle meat, goat meat, horse meat, sheep meat, cereal grains, and poultry fat with the Codex MRLs for the same commodities. In general, we encourage EPA to consider a more comprehensive approach to MRL harmonization by evaluating not only existing U.S. tolerances, but also cases where Codex has established an MRL and EPA has no corresponding tolerance. Given that EPA's initial draft and revised human health risk assessments (DP420609, June 5, 2017 and DP453791, September 26, 2019, respectively) found no dietary or aggregate risks of concern for deltamethrin, USDA suggests that further action to harmonize with Codex is unlikely to alter EPA's overall safety findings.

USDA identified several commodities with Codex MRLs for which EPA has not established tolerances and does not appear to have considered harmonization, including flowerhead Brassicas (includes broccoli; broccoli, Chinese; and cauliflower); grape; leafy vegetables; leek; legume vegetables; mushrooms; nectarine; peach; plums (including fresh prunes); pulses; spices, fruits and berries; spices, roots and rhizomes; strawberry; table olives; and tea, green, black (black, fermented and dried) (Codex Alimentarius, 2017). USDA encourages EPA to evaluate the potential for Codex-aligned import tolerances for these commodities.

Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Comments

APHIS Plant Protection and Quarantine (PPQ) appreciates the opportunity to comment on the proposed interim decision for deltamethrin. APHIS does not have concerns about the proposed mitigation measures and appreciates OPP's proposed label clarifications and careful consideration of mitigation options. This comment discusses current PPQ programs that use deltamethrin.

Asian Citrus Psyllid

Citrus greening or huanglongbing, is a devastating bacterial disease that attacks the vascular system of plants and was first introduced to the United States in 2005. Once infected, there is no known cure for a tree with citrus greening disease. APHIS has established regulations to control the artificial (human assisted) spread of the Asian citrus psyllid (ACP) vector to non-infested areas of the United States, in order to slow the spread of citrus greening disease. Both adults and nymphs feed on young foliage, depleting the sap and causing galling or curling of leaves, and high populations can kill the growing citrus shoot. In addition to directly feeding in citrus trees, the psyllid can transmit *Liberibacter asiaticum*, an endocellular phloem-restricted bacterium that causes citrus greening, which causes yellow shoots, blotchy mottling and chlorosis, reduced foliage, and tip dieback of citrus plants. Citrus greening greatly reduces fruit production, destroys the economic value of the fruit, and can kill the trees. In areas of the world where citrus greening is endemic, citrus trees decline and die within a few years and may never produce usable fruit. APHIS designates federal quarantine areas for ACP and/or citrus greening and regulates the interstate movement of all ACP and citrus greening host plant material from quarantine areas. Nursery stock that originates in areas with ACP must be treated with a soil drench or an in-ground granular application of a neonicotinoid (dinotefuran or imidacloprid) followed by a foliar spray of a pyrethroid, either bifenthrin, deltamethrin, fenpropathrin, or a cyfluthrin and imidacloprid mixture. Chlorpyrifos is a foliar spray alternative.

Japanese Beetle

The Japanese Beetle (JB) occurs throughout most of the United States east of the Mississippi River. Adults feed on the foliage and fruits of several hundred species of fruit trees, ornamental trees, shrubs, vines, and field and vegetable crops. Damage includes large irregular holes in leaves or skeletonized leaves. The grubs develop in the soil and feed on the roots of plants and grasses and often destroy turf in lawns, parks, golf courses, and pastures. It is the most widespread turf-grass pest in the United States.

The quarantine administered by APHIS is intended to protect agriculture in the western United States, which is currently JB-free. APHIS works to prevent human-assisted JB spread, particularly by aircraft, from the eastern U.S. where it is well established to the nine 'protected' western states. The program utilizes an attractant to monitor populations across known infested eastern states to determine risk at infested airports in order to choose appropriate mitigation procedures and timing. The program may implement exclusionary measures for aircraft, such as changes to aircraft operating areas, position, or flight schedules, or impose physical barriers such

as enclosed walkways or excluder devices. Determining and using proper exclusion methods may also then reduce the need for chemical treatment of infested aircraft or cargo.

When chemical treatment is needed, the program uses existing stocks of a 10% d-phenothrin product, or a d-phenothrin plus permethrin formulation, for treatment of infested unoccupied passenger or cargo aircraft. In addition, bifenthrin, cyfluthrins, deltamethrin and permethrin are also recommended to control adults in an Integrated Pest Management (IPM) handbook for homeowners developed by USDA Agricultural Research Service (ARS) and APHIS.

Khapra Beetle

The khapra beetle (*Trogoderma granarium*) is one of the most destructive pests of grain products and seeds. It is not present in the U.S., but is intercepted at ports. Established infestations are difficult to control because the beetle can survive without food for long periods of time, requires little moisture, hides in tiny cracks and crevices, and is relatively resistant to many insecticides and fumigants, in addition to being very small at between 2 and 3 millimeters long. It will feed on grains, cereal products, and almost any dried plant or animal matter. As a surface, perimeter, spot, mist, or crack and crevice treatment, deltamethrin is used for khapra beetle in containers and ships, or on aircraft.

Hitchhiker treatments

These treatments are done as a surface, perimeter, spot, or crack and crevice for ‘hitchhiking’ pests on containers and ships. Hitchhikers are external pests which are not directly associated with their host material and which move with cargo, in baggage, or in carriers. Examples include crickets, scarab beetles, ants, and ‘killer’ bee (*Apis mellifera scutellata*) swarms. Cypermethrin, cyfluthrins, deltamethrin, and lambda-cyhalothrin are options for this treatment.

References

Codex Alimentarius, 2017. Pesticide Database: 135 – Deltamethrin. http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/pesticide-detail/en/?p_id=135. Accessed June 10, 2020.

IRAC, 2019. Insecticide Resistance Action Committee Mode of Action Classification, online module. <https://www.irac-online.org/modes-of-action/>. Accessed May 20, 2020.